REQUEST

FUR CONTINUED EXAMINATION (RCE)

Application Number	09/9 +1 .098	
Filing Date	July 23, 2001	
First Named Inventor	kang-wook Park	
Group Art Unit	2814	
Examiner Name	Dana Farahani	

Subsection (b) of 35 U S C § 132, effective on May 29, 2000.	Examiner Name	Dana Farahani	
provides for continued examination of an utility or plant application filed on or after June 8, 1995. See The American Inventors Protection Act of 1999 (AIPA).	Attorney Docket Number	5649-805DV	
This is a Request for Continued Examination (RCE) under 37 NOTE: 37 CFR § 1.114 is effective on May 29, 2000. If the above it wish to consider filling a continued prosecution, application (CPA) under 37 the patent ferm adjustment provisions of the AIPA. See Changes to Applie For Reg. 30.392 (Aug. 16, 2003). Interim Rule, 65 Fed. Reg. 14865 (Mar. est. blished FCE practice.	dentified application was filed prior to l C.E.R. § 13-53(d) (PTO/SB/29) instea cation Examination and Provisional A	May 29, 2000, applicant may add of an RCE to be eligible for pplication Fractice, Final Fule, 65	
1. Submission required under 37 C.F.R. § 1.114			
a. Previously submitted		, 	
Consider the amendment(s)/reply under 3		y filed on	
(Any unentered amendment(s) referred to above will be enter II. Consider the arguments in the Appeal Brie		filed on	
		med on	
b. : Enclosed			
□ Affidavit(s)/Declaration(s)			
ııı			
iv [] Other			
2. Miscellaneous			
a Suspension of action on the above-identified s	annlication is requested un	der 37 C.E.R. 8 1 103(c) for	
a. Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of months. (Period of suspension shall not exceed 3 months. Fee under 37 C.F.R. § 1.17(i) required)			
b. Other			
3. Fees The RCE fee under 37 C F.R. § 1.17(e) is required by 37 C	F.R. § 1.114 when the RCE is filed		
a. The Director is hereby authorized to charge the	ha fallowing face, or gradit	any overnayments, to	
a. If he Director is hereby authorized to charge to Deposit Account No.	ne following fees, or credit	arry overpayments, to	
RCE fee required under 37 C.F.R. § 1.17(e)		
Extension of time fee (37 C.F.R §§ 1.136 and 1.17)			
□ Other	· · · · · · · · · · · · · · · · ·		
b. Check in the amount of \$750.00 enclosed			
c. Payment by credit card (Form PTO-2038 enclosed)			
d. [] If necessary, the Director is hereby authorized to charge any deficiencies, or credit any			
overpayments, to Deposit Account No. 50-0220			
L			
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED			
Name (Print Type) Grant J. Scott	Registration No. (/	Attorney/Agent) 36,925	
Signature	Date April 24	4, 2003	
CERTIFICATE OF MAILIN	NG OR TRANSMISSION		
Thereby certify that this correspondence is being deposited with the Urin an envelope addressed to Commissioner for Patents, Box RCE, Wand Trademark Office on:	nited States Postal Service with s /ashington, DC 20231, or facsimil	sufficient postage as first class mail le transmitted to the U.S. Patent	
Name (Print Type) Candi L. Riggs			
Signature Candi & Rigo	Date April 24	4, 2003	

PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Kang-Wook Park Serial No.: 09/911,098 Group Art Unit: 2814 Examiner: Dana Farahani

Filed: July 23, 2001

BIPOLAR JUNCTION TRANSISTORS HAVING TRENCH-BASED

BASE ELECTRODES

April 24, 2003

BOX RCE Commissioner for Patents Washington, DC 20231

AMENDMENT B

Sir:

For:

Please enter this amendment prior to any further review of this application.

In the Claims:

Please amend the claims as follows:

(Amended) A bipolar junction transistor, comprising:
 an intrinsic collector region of first conductivity type in a semiconductor substrate;

a trench in said substrate, adjacent said intrinsic collector region;

a base electrode of second conductivity type in the semiconductor substrate, said base electrode comprising a trench-based electrode portion that extends in said trench and a lateral base electrode extension that extends outside said trench;

an extrinsic base region of second conductivity type that is self-aligned and electrically connected to said lateral base electrode extension and forms a P-N rectifying junction with said intrinsic collector region;

an intrinsic base region of second conductivity type that is self-aligned to said lateral base electrode extension, has a lower second conductivity type doping concentration therein relative to said extrinsic base region and forms a P-N rectifying junction with said intrinsic collector region;

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